Tacoma Dome Link Extension

Elected Leadership Group #9

June 14, 2019

SoundTransit

Agenda

- Public comment
- Follow up to May 31 meeting information requests
- Recommendation of a preferred alternative and other alternatives to study in the Draft EIS
- Next steps

Follow up to May 31 meeting information requests

ELG requests for more information

- Estimated travel time differences for South Federal Way Station
- Link speed and safety precautions
- Preliminary estimates
- Design refinements requiring third party funding
- Examples of elevated guideway
- Recent City Council actions

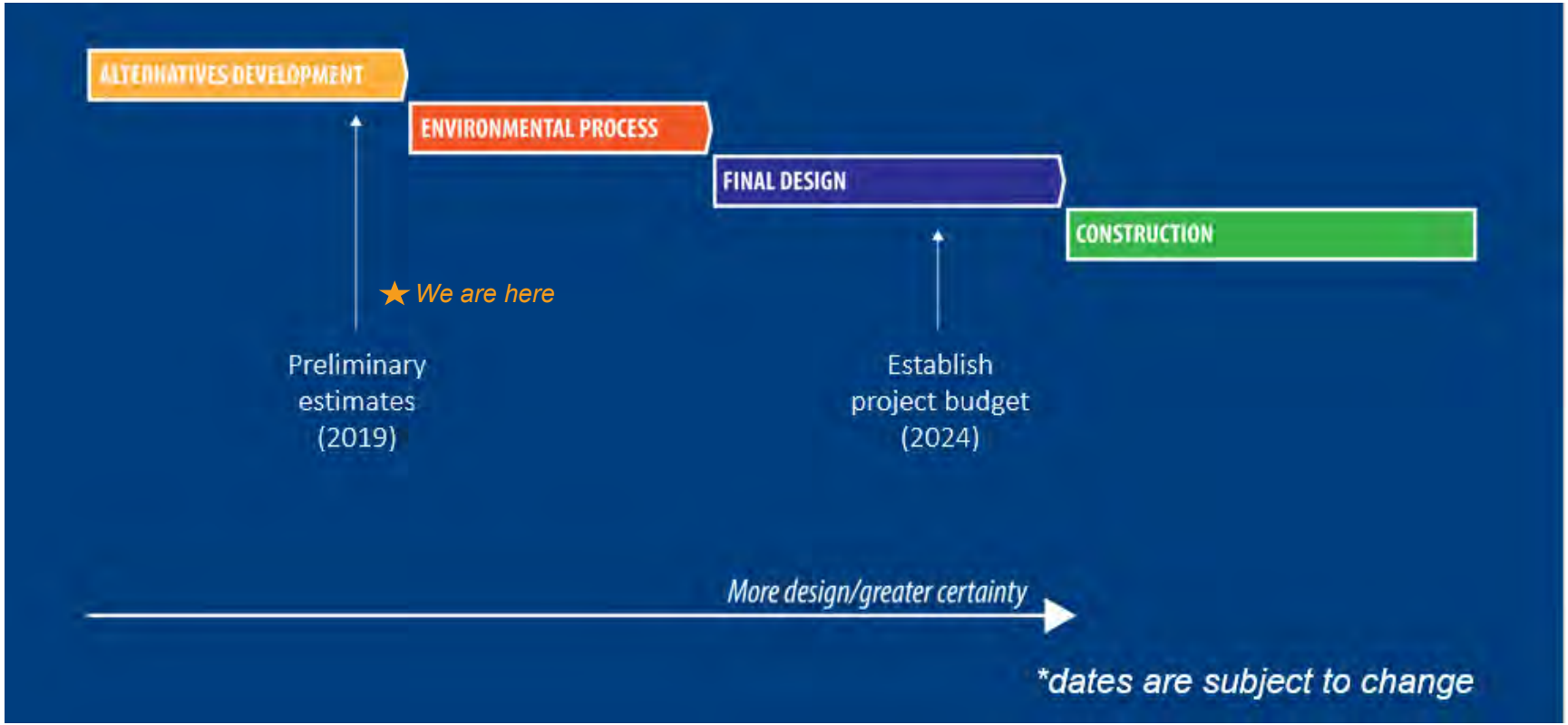
Preliminary estimates*

- ***Purpose: To inform comparison of alternatives***

- **Preliminary estimates** analyzed for end-to-end alternatives and station concepts used:
  - Consistent methodology (2018$; construction, real estate, etc.)
  - *Limited conceptual design* (less than 3% design)
  - Does not establish project budget
- **Project budget** established later in design
- Preliminary estimates include:
  - Construction, right-of-way, professional services, unallocated contingency
  - Does not include vehicles
  - Numbers are rounded

**Preliminary estimates are rounded and are not the project's budget. They are to be used for comparisons between alternatives.*

Project budget*



SoundTransit

End-to-end alternatives: Range of preliminary estimates*

- ***Left:*** *Representative project for comparison, updated to 2018$.*
- ***Center (Low):*** *Alternatives with more potential with lowest preliminary estimates* (see map next page)
- ***Right (High):*** *Alternatives with more potential with highest preliminary estimates* (see map next page)

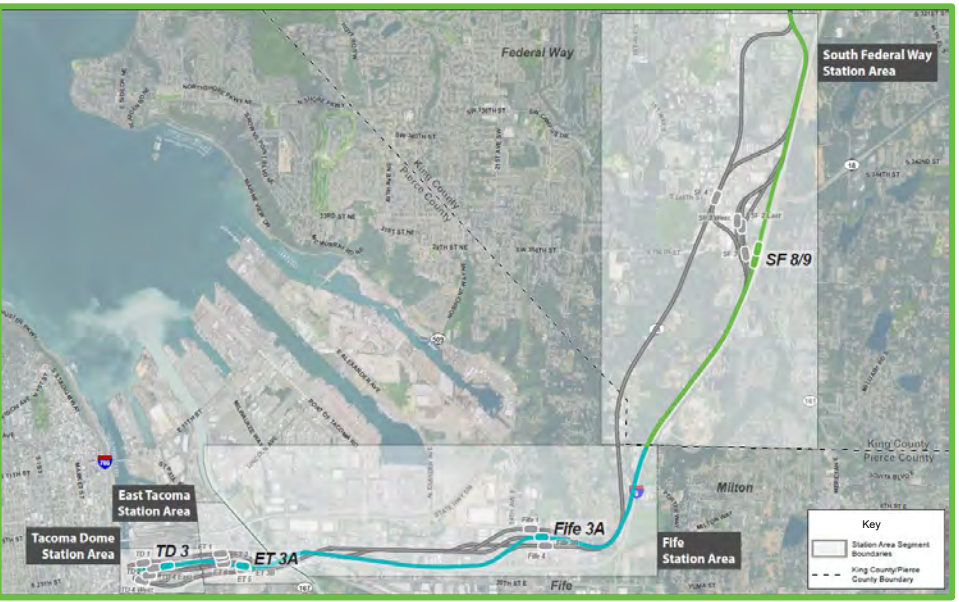
- ***Preliminary estimates for end-to-end alternatives with more potential range from $2.65B - $3.20B***

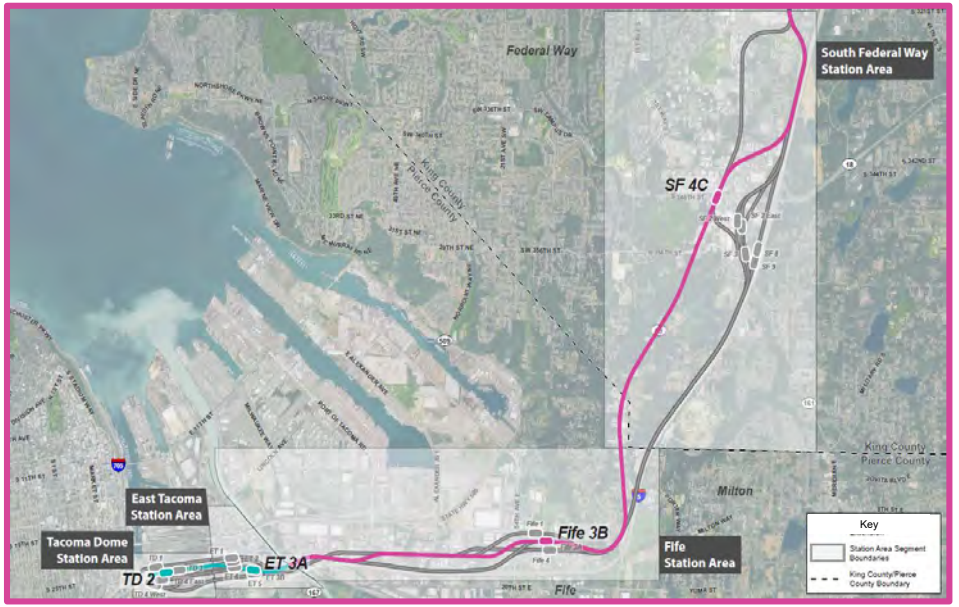
*Preliminary estimates are rounded and are not the project's budget. They are to be used for comparisons between alternatives.

SoundTransit

End-to-end alternatives: Range of preliminary estimates*

- **Low:** *Alternatives with more potential with lowest preliminary estimates*
- **High:** *Alternatives with more potential with highest preliminary estimates*





**Preliminary estimates are rounded and are not the project's budget. They are to be used for comparisons between alternatives.*

SoundTransit

Third party funding

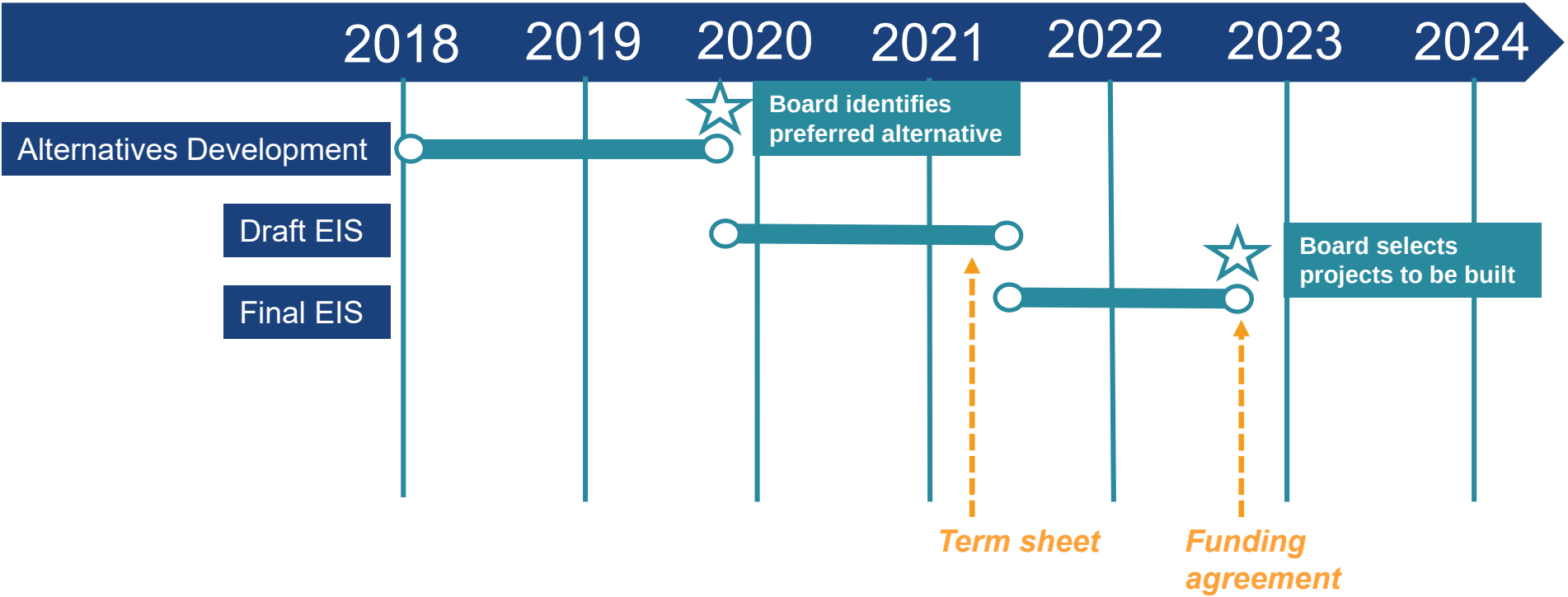
Items beyond scope of ST3

- Cut-and-cover station at Tacoma Dome
- Parking facilities at Tacoma Dome or East Tacoma

Non-Motorized access improvements in excess of project allowance, such as:

- Pedestrian bridges over I-5
- Non-motorized access integration with Puyallup River light rail bridge

Process for third party funding



SoundTransit

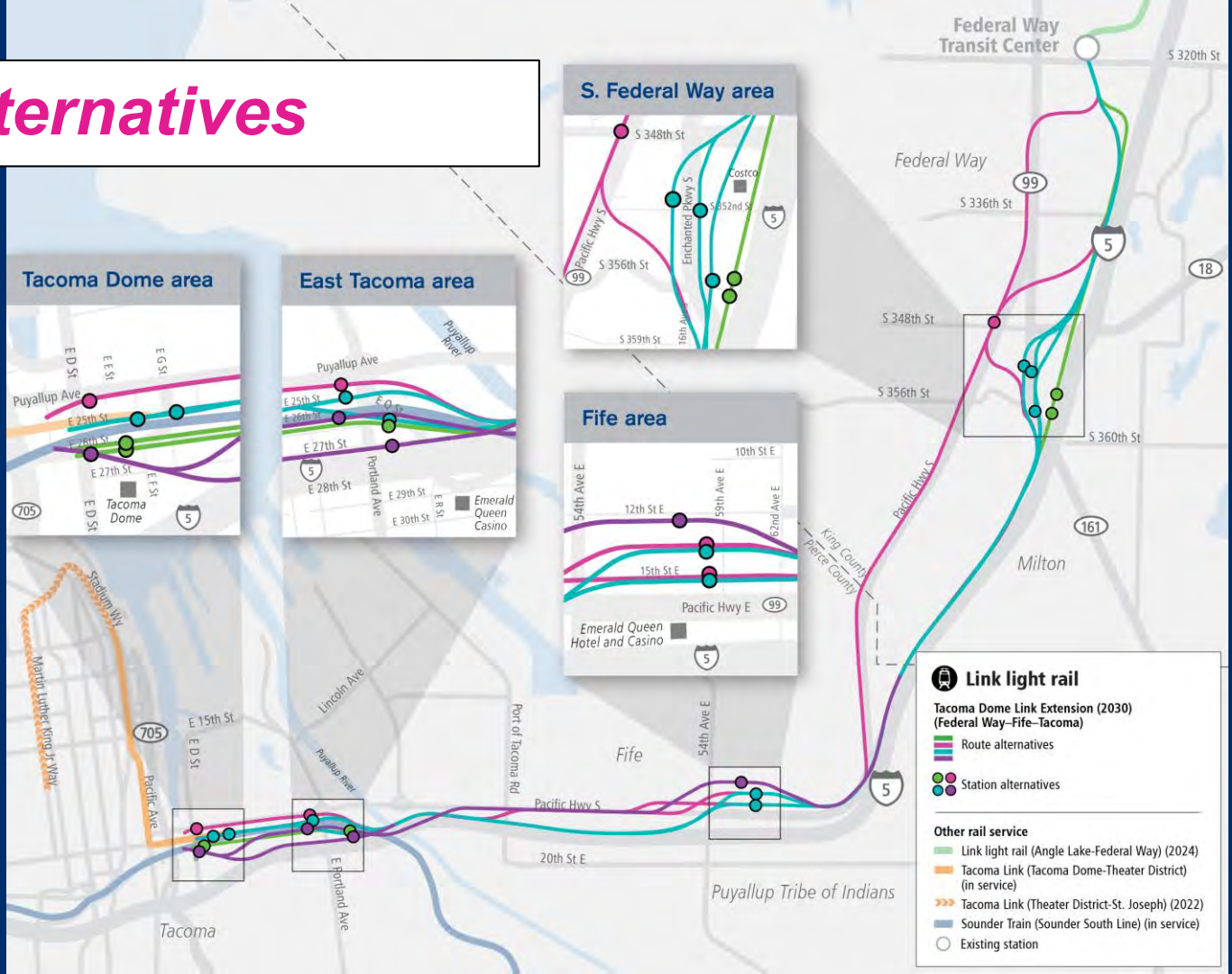
Recommendation of a preferred alternative and other alternatives to study in the Draft EIS

External engagement summary

During Alternatives Development phase: February 2018 – May 2019

1,229 comments and questions
16 email updates
18 fairs, festivals, tabling events
13 open houses, workshops with 610+ total participants
82 community briefings
6 Stakeholder Group meetings
9 Elected Leadership Group meetings
3 online open houses with 8,300+ total participants

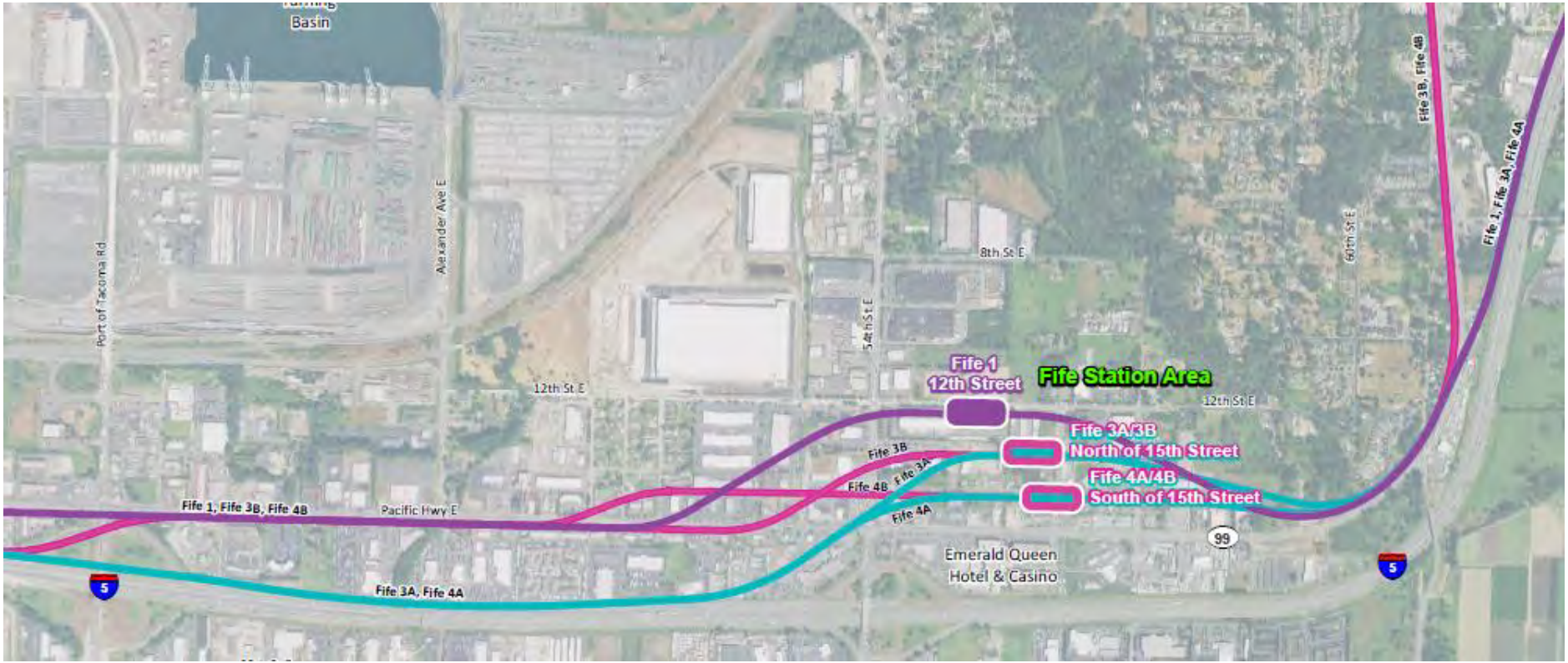
Level 2 alternatives



South Federal Way

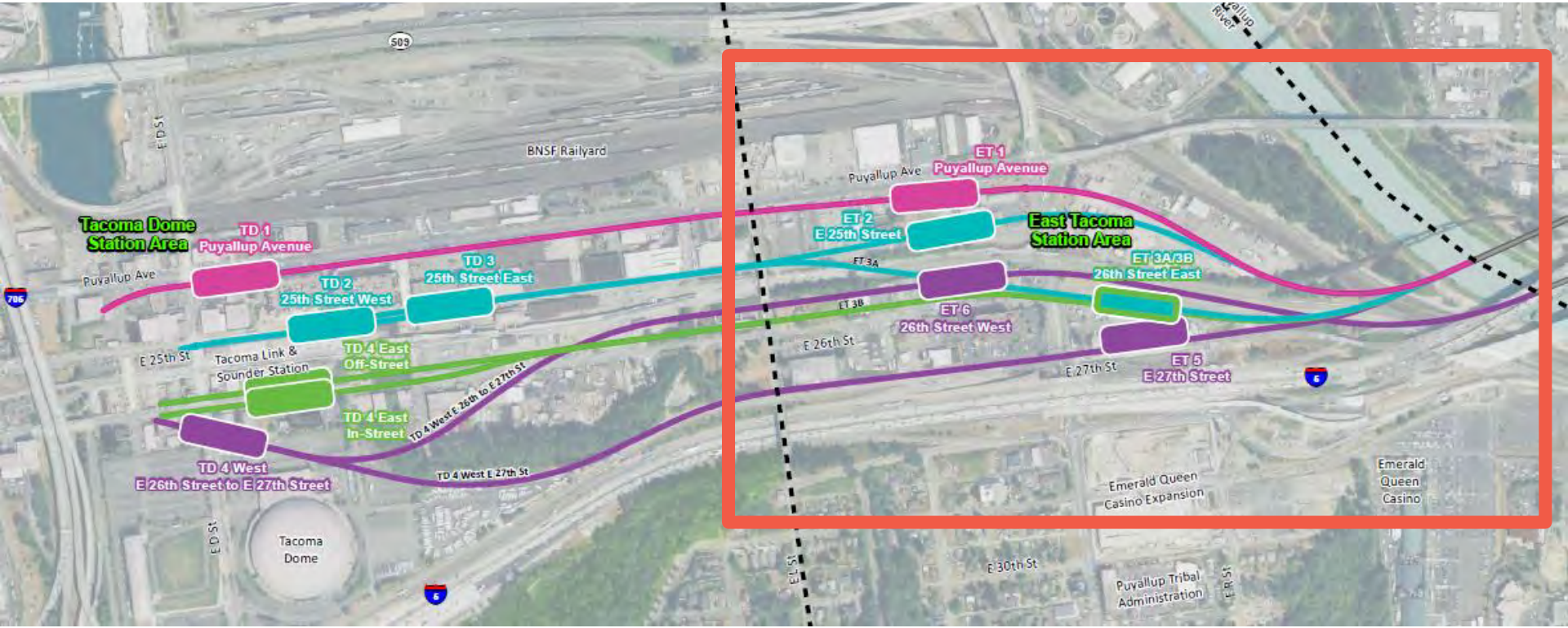
SoundTransit

Fife

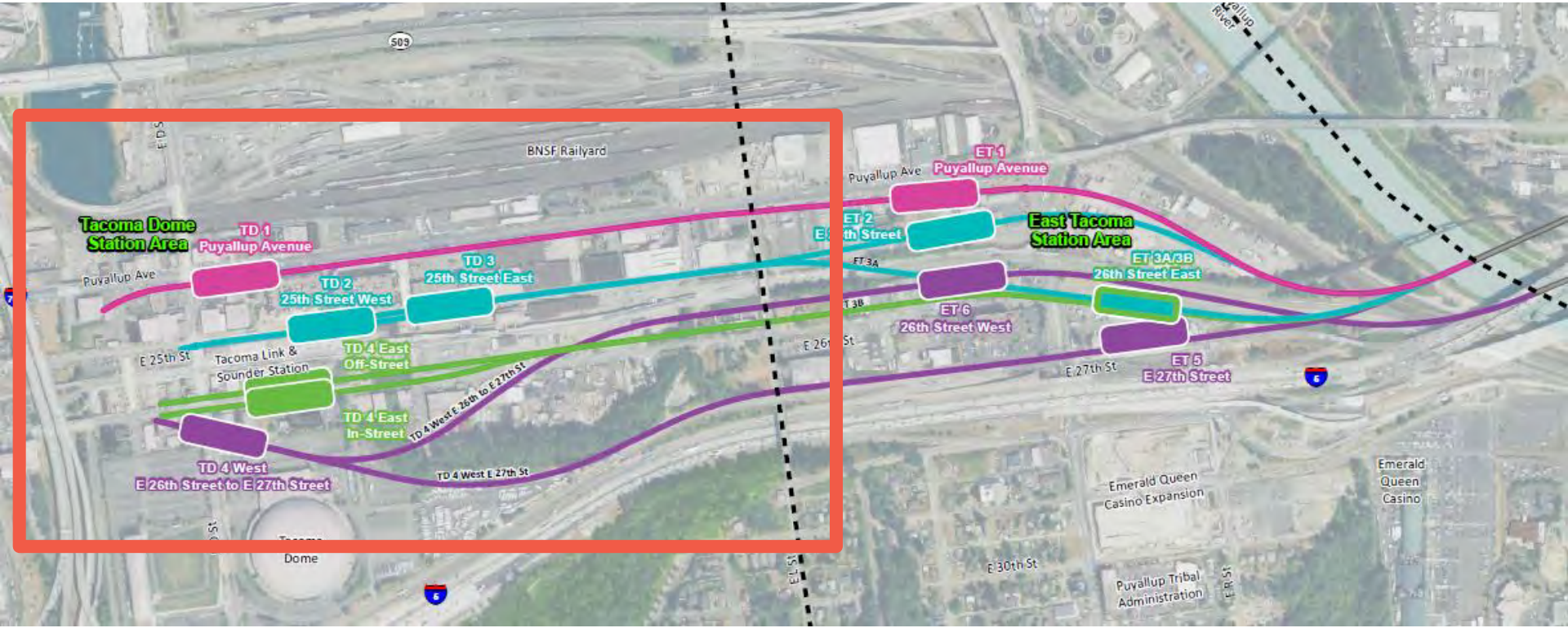


SoundTransit

East Tacoma


Tacoma Dome Station Area
TD 1 Puyallup Avenue
TD 2 25th Street West
TD 3 25th Street East
TD 4 East Off-Street
TD 4 East In-Street
TD 4 West E 26th Street to E 27th Street
TD 4 West E 26th to E 27th St
TD 4 West E 27th St
Puyallup Ave
E 25th St
Tacoma Link & Sounder Station
BNSF Railyard
Tacoma Dome
East Tacoma Station Area
ET 1 Puyallup Avenue
ET 2 E 25th Street
ET 3A/3B 26th Street East
ET 6 26th Street West
ET 5 E 27th Street
E 26th St
E 27th St
E 30th St
Emerald Queen Casino Expansion
Emerald Queen Casino
Puyallup Tribal Administration

Tacoma Dome


509
BNSF Railyard
Tacoma Dome Station Area
TD 1 Puyallup Avenue
TD 2 25th Street West
TD 3 25th Street East
TD 4 East Off-Street
TD 4 East In-Street
TD 4 West E 26th Street to E 27th Street
TD 4 West E 26th to E 27th St
TD 4 West E 27th St
Puyallup Ave
E 25th St
Tacoma Link & Sounder Station
Dome
ET 1 Puyallup Avenue
ET 2
East Tacoma Station Area
ET 3A/3B 26th Street East
ET 6 26th Street West
ET 5 E 27th Street
E 27th St
E 30th St
Emerald Queen Casino Expansion
Emerald Queen Casino
Puyallup Tribal Administration

SoundTransit

Next steps

TDLE next steps*

Public participation throughout

2019

Spring 2019
EIS scoping / public comment period

June 2019
ELG makes recommendation to the ST Board

July 2019
ST Board & FTA expected to identify alternatives to study in EIS

2020 / 2021

Spring 2021
Draft EIS issued; public comment period

2022

Spring/Summer 2022
Final EIS issued

Summer 2022
ST Board selects project to be built

FTA issues record of decision (ROD)

**dates are subject to change*

Thank you.

SOUNDTRANSIT

soundtransit.org

Travel time for South Federal Way to Tacoma Dome

- **Travel time differences among TDLE alternatives are less than one minute for all segments, except for segments in South Federal Way.**
- **Travel times do not result in significantly different ridership among the alternatives.**

- South Federal Way travel time differences are due to:
  - Track length—SF 4D (longest alternative, I-5 to SR-99 to I-5) is 0.4 miles longer than SF 8/9 and 0.2 miles longer than SF 2 West (Enchanted Parkway)
  - Track curves—SF 4D introduces the most curves with slower train speeds
  - All alternatives have the same station dwell time and train deceleration and acceleration
- The travel time differences for the South Federal Way segment are (*see map next page*):
  - SF 4D is 35-40 seconds longer than SF 8/9
  - SF 4D is 10-15 seconds longer than SF 2 West
  - SF 2 West is 25-30 seconds longer than SF 8/9

- Under the Level 2 analysis, proximity to origins and destinations drove performance levels of station alternatives.
- For example, in South Federal Way, SF4 was rated 'high' on ridership, while SF2 West and SF 8/9 were rated 'moderate.'

South Federal Way

SoundTransit

Link light rail speed and safety

- **Ideal curves are 55 MPH for light rail. A variety of design considerations could require slower design curves:**
  - Serving important destinations with a station
  - Avoiding or minimizing built and/or environment impacts
- **Link automatic train protection (ATP) is the primary safety system to prevent Link trains from going overspeed**
  - The ATP system works with the signal house located along each section of the track to compare the train's actual speed to the speed allowed on that section of track
  - If train is over the allowed speed and the operator does not act in response to the visual and audio "overspeed" indicators, the train will automatically brake until it stops
  - Link uses fail-safe technology to control train operations. If something goes wrong (e.g., power failure), the train will stop and will not re-start without direct approval. No other trains will be allowed on that section of track.

Visual references for elevated alignment on SR 99

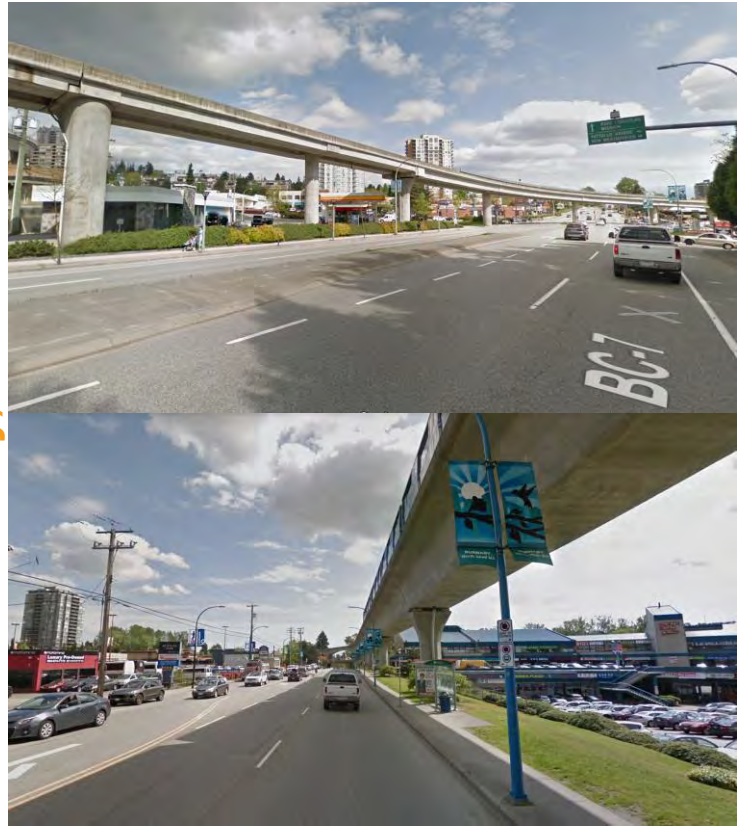
Link light rail: Angle Lake, Tukwila

Link light rail: Tukwila

Visual references for elevated alignment on SR 99

Metrotown, British Columbia

Burnaby, British Columbia



Visual references for elevated station

Link light rail: Angle Lake Station

Link light rail: Mount Baker Station

Recent City Council actions

See attached letters

- City of Federal Way
- City of Tacoma